

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning on page 4, line 4 with the following amended paragraph:

A ~~f~~riction elements of the transmission, clutches and brakes, are hydraulically-actuated elements, whose alternate engagement and disengagement connect and disconnect, respectively, components of the planetary gearsets of the automatic transmission. As the components are connected and released, the various gear ratios of the transmission are produced. The forward clutch 32 is engaged whenever the transmission is required to produce forward drive, including the D and L ranges. The forward clutch is disengaged whenever the transmission is required to operate in any of the other ranges.

Please replace the paragraph beginning on page 4, line 25 with the following amended paragraph:

Referring now to Fig. 2, a solenoid body assembly 50 defines a recess 52, surrounded by a gasket 54, located adjacent a transmission case 56. A center support 58, a structural component connected to the case 568, is formed with internal screw threads that are engaged by external screw threads on the outer surface of a tube 60. The tube shank 62 engages screw threads tapped into the center support 58. The tube 60 is formed with a head 64, which contacts the surface of the case 56 when the tube is installed in the transmission assembly. The head 64 is formed with a planar surface 66, which provides a seat on which an orifice plate 68 contacts the tube head. Orifice plate 68 is formed with a surface 70, which contacts the seat 66 at the head of the tube. The shank of the tube is formed with the longitudinal passage 38, through which hydraulic fluid enters the forward clutch 32 from chamber 75 and exits the forward clutch through chamber 75.

Please replace the paragraph beginning on page 5, line 11 with the following amended paragraph:

The orifice 36 is surrounded by a flat sheet surface 70, which contacts and becomes seated on the surface 66 of the tube head 64. The surface 70 is surrounded by four flanges 72, turned axially in a first direction normal to surface 70, and four other flanges 74 turned axially in the opposite direction. Located between each of the flanges 72, 74 is an opening 76, spaced angularly about the central axis 78 of the orifice plate from other openings. Each opening 76 extends radially toward the central axis 78 and circumferentially about the axis.

Please replace the paragraph beginning on page 5, line 19 with the following amended paragraph:

Chamber 75 connects passage 38 alternately to the line pressure source and to the sump depending on the position of the manual valve spool 12. Orifice plate 3 68, located within chamber 75, moves into contact with surface 66 and away from that surface depending in the direction of fluid flow to and from the forward clutch 32. In operation, when the valve spool 12 moves to the forward drive position, the line pressure source 20 is open to chamber 75, and surface 70 of orifice plate 68 6 is forced into contact with the surface 66 of the head 64. This contact provides a seal against the passage of fluid into passage 38 other than through orifice 36. The diameter of orifice 36 is sized to control the rate of fluid flow into passage 38 and to the forward clutch 32. Flanges 72 are located so that they surround the outer cylindrical surface 80 and the tube head 64 and are guided by surface 80 to a position where the orifice is substantially aligned with passage 38.

Please replace the paragraph beginning on page 6, line 1 with the following amended paragraph:

When the position of the manual valve spool 12 is changed to a position other than the drive position, a hydraulic connection between forward clutch 32 and the low pressure sump 24 is opened through the manual valve 10. Fluid flows from clutch 32 through passage 38, chamber 75, passage 40, ports 42, 44, and passage 26 to the sump 24, the exhaust pressure source 24. When this occurs, fluid flowing from passage 38 forces orifice plate 68 away from contact with surface 66, and the flanges 74 approach or contact stop surface 82, which is located at the opposite end of chamber 75 from the location of the tube head 64. Fluid exiting the forward clutch through passage 38 flows past orifice plate 68 by flowing through the angularly spaced openings 76 located between the flanges 72, 74. Because flanges 74 contact surface 82, the openings 76 are held away from contact with surface 82. This permits free, unobstructed fluid flow from clutch 32.

Please delete the Abstract from page 12, place the Abstract on new page 13, delete the Abstract title

~~ABSTRACT OF THE ORIFICE PLATELOSURE~~

and substitute the following Abstract title:

ABSTRACT OF THE DISCLOSURE